

Use Attainability Analysis

for

WBID 1276 Big Deer Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

RECEIVED

2005 JUL 11 PM 4:32

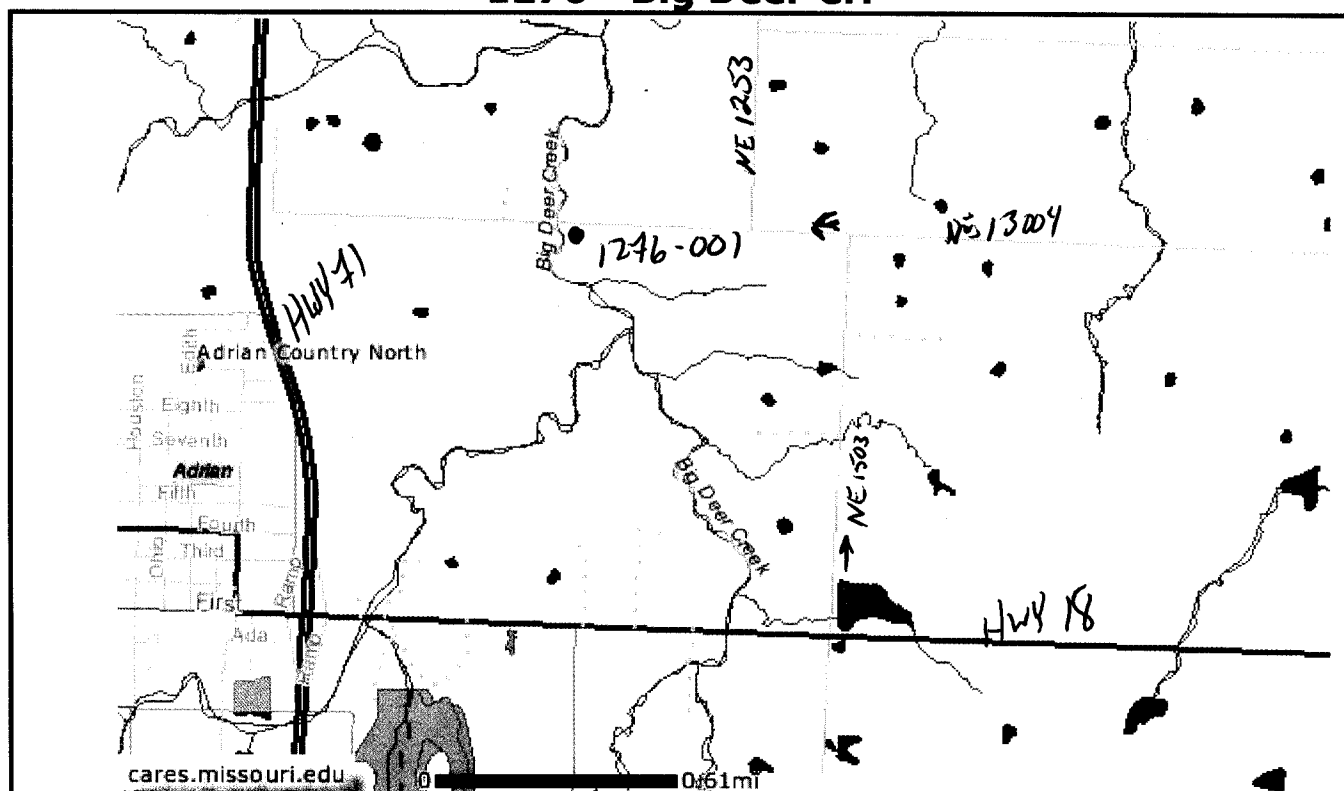
WATER PROTECTION PROGRAM

Water Body Name (from USGS 7.5' quad):	Big Deer Cr.	
8-digit HUC:	10290108	
Missouri WBID #:	1276	
County:	Bates	
Upstream Legal Description:		
Downstream Legal Description:		
Upstream Coordinates:	N 38.40857 W 094.32971	
Downstream Coordinates:	N 38.43277 W 094.29685	
Discharger Facility Name(s):	Adrian WWTF	
Discharger Permit Number(s):	MO 0112623	
Number of Sites Evaluated:	3	
Name of Surveyor and Telephone Number:	Aaron Bleibaum 816-622-7018	
Organization:	MONR	
Position:	Env. Specialist	

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Aaron Bleibaum Date: 7/8/05

1276 - Big Deer Cr.



Legend

- Water Quality Information System (WQIS)

Roads and Highways

- Interstate
- U.S. Highway
- State Numbered Highway
- State Lettered Highway
- Principal Road
- Road or Street
- Private Road or Drive

1:24,000 Rivers and Streams

- Perennial Stream/River
- Intermittent Stream/River
- Artificial Path (Approx. Centerline)
- Undifferentiated Stream/River
- Canal or Ditch
- Other Hydrologic Feature

NHD Rivers and Streams

- Perennial Stream/River
- Intermittent Stream/River
- Canal or Ditch
- (cont)

- Artificial Path (Approx. Centerline)
- Other Hydrologic Feature

Incorporated Areas

- City
- Town
- Village
- Census Designated Place
- Other

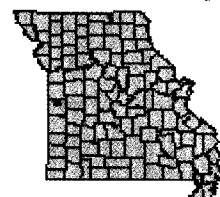
1:24,000 Water Bodies

- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- Swamp or Marsh
- Canal or Ditch
- Other Water Body

NHD Water Bodies

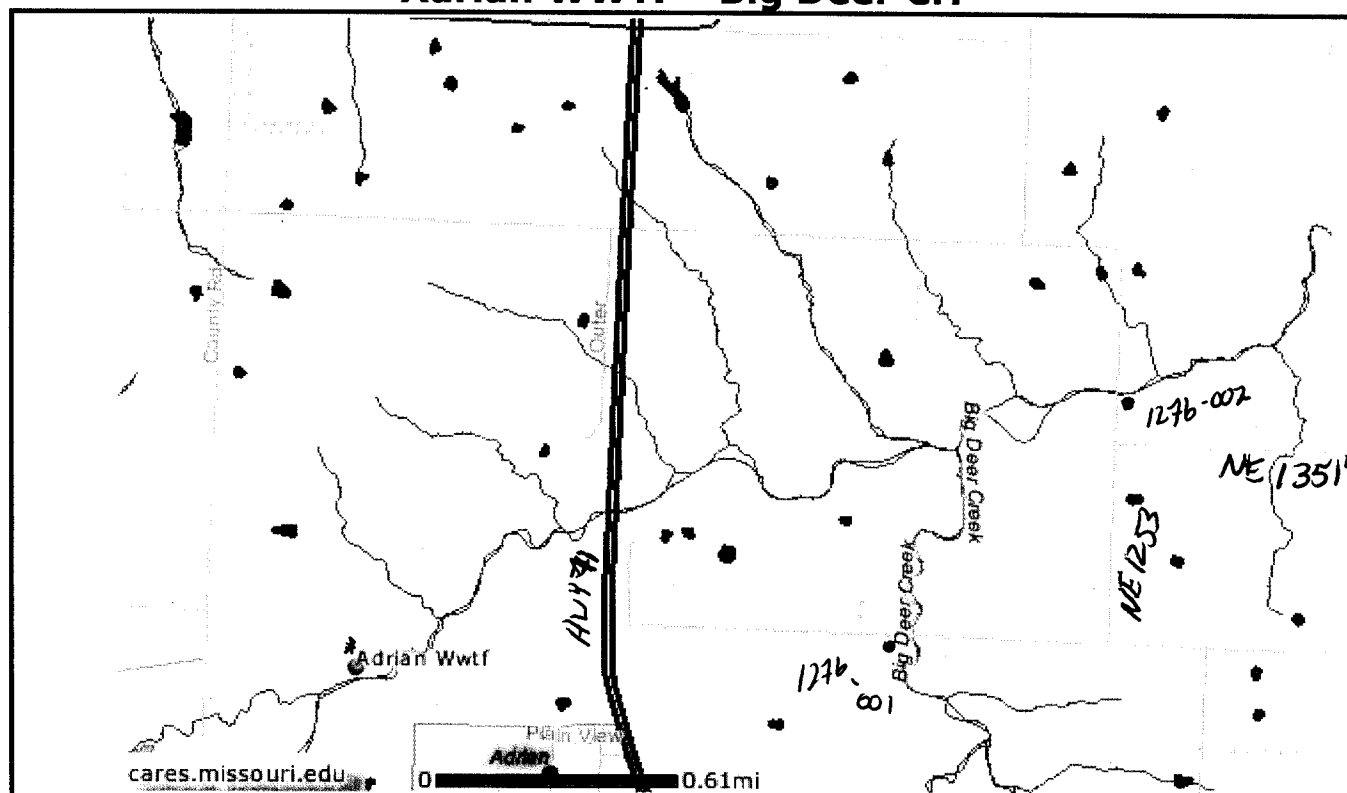
- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- (cont)

Location Map



Map prepared by:
<http://cares.missouri.edu>, 7/6,

Adrian WWTF - Big Deer Cr.



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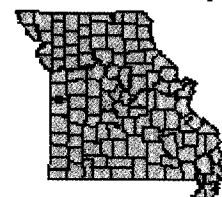
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- Reservoir
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- Canal or Ditch
- Other Water Body

NHD Water Bodies

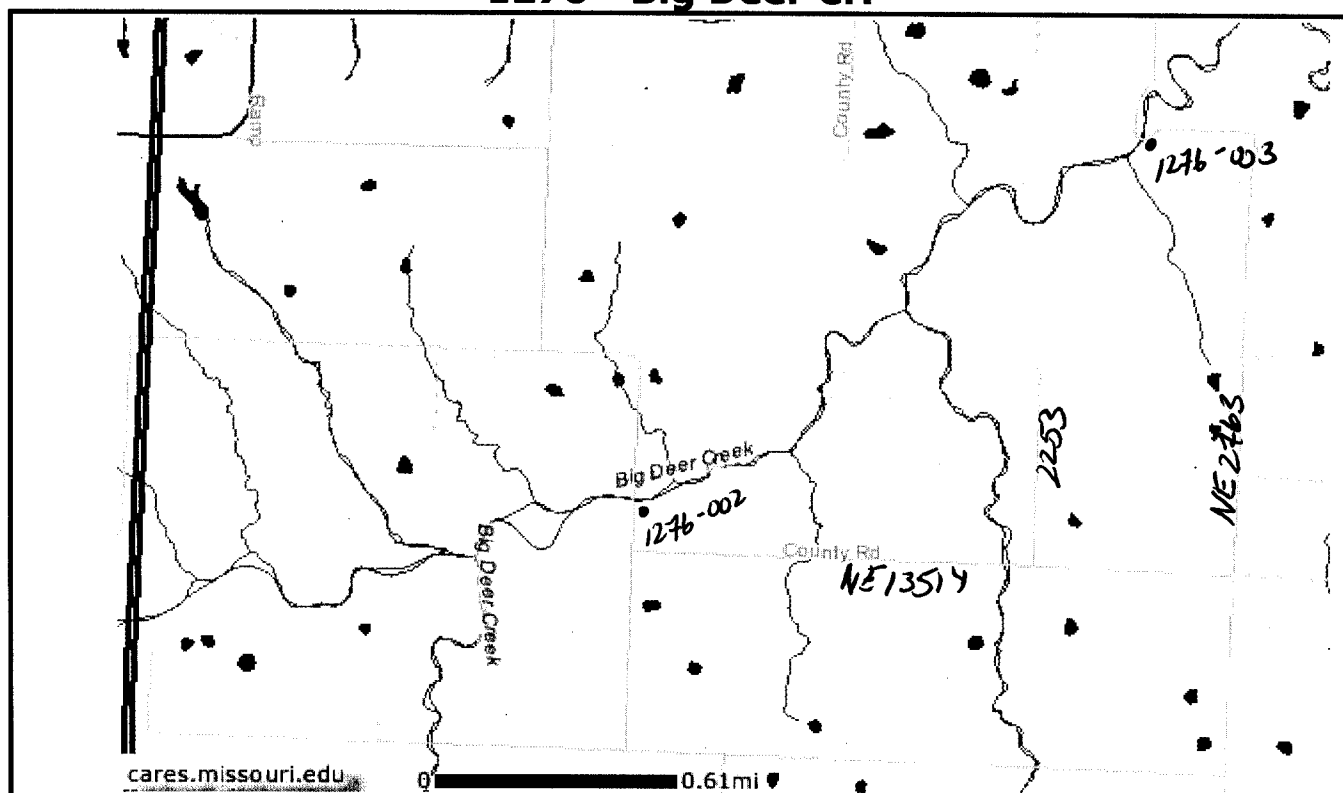
- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- (cont)

Location Map



Map prepared by:
<http://cares.missouri.edu>, 7/6,

1276 - Big Deer Cr.



Legend

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- Intermittent Stream/River
- Canal or Ditch
- (cont)

- Artificial Path (Approx. Centerline)
- Other Hydrologic Feature

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- Town
- Village
- Census Designated Place
- Other

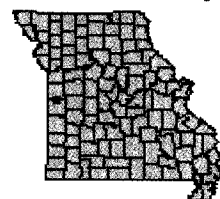
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- Reservoir
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- Swamp or Marsh
- Canal or Ditch
- Other Water Body

NHD Water Bodies

- Lake or Pond
- Lake or Pond (Intermittent)
- Reservoir
- Stream or River
- (cont)

Location Map



Map prepared by:
<http://cares.missouri.edu>, 7/6,

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: <u>276-001</u>	Site Location Description: <u>NE 13004 Rd. Bates Co.</u>	
Site GPS Coordinates: <u>N38.4085 W94.3291</u>		
Date & Time: <u>7/7/05 8:43 AM</u>	Facility Name: <u>Adrian WWTF</u>	
Personnel: <u>Aaron Bleibum</u>	Permit Number: <u>MO 0112623</u>	
Current Weather Conditions: <u>Clear 73°F</u>	Weather Conditions for Past 7 days: <u>Dry</u>	
Photo Ids: Upstream: <u>1-3</u>	Downstream: <u>4-6</u>	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

0.1 on surface of water

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Dense vegetation, pastures</u>	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 176-001:

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>15</u>	Length (ft): <u>30</u>	Avg. Depth (ft): <u>1 ft</u>	Max. Depth (ft): <u>1.5 ft</u>
<input type="checkbox"/> Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated (ft ³ /sec):		

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>15</u>	Length (ft): <u>75</u>	Avg. Depth (ft): <u>1 ft</u>	Max. Depth (ft): <u>2.5 ft</u>
<input type="checkbox"/> Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated (ft ³ /sec):		

Substrate*: (These values should add up to 100%.)

<u>10</u> % Cobble	<u>10</u> % Gravel	<u>20</u> % Sand	<u>60</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>No alge detected</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input checked="" type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Rain Blehman Date: 7/7/05

Organization: MDNR Position: Env. Specialist

1276-001 D1



1276-001 U



1276-001 U2



1276-001 U3



1276-002 D1



1276-002 D2



1276-002 D3



1276-002 D4



1276-002 D5



1276-002 D6



1276-002 U1



1276-002 U2



1276-002 U3



1276-002 U4



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 1276-003	Site Location Description: NE 2763 Rd. Bates Co.	
Site GPS Coordinates: N38.43280 W094.29686		
Date & Time: 7/7/05 9:19 AM	Facility Name: Adair WWTF	
Personnel: Aaron Heibauer	Permit Number: MO 0112623	
Current Weather Conditions: Dry 75°F	Weather Conditions for Past 7 days: Dry	
Photo Ids: Upstream: 17-19	Downstream: 20-23	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*:

(Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: Bean fields, corn fields	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: Old engine in stream				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1746-003:

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>36</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1.5 ft</u>	Max. Depth (ft): <u>2 ft</u>
<input type="checkbox"/> Flow	Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated (ft ³ /sec):	

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>33</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1.5 ft</u>	Max. Depth (ft): <u>2 ft</u>
<input type="checkbox"/> Flow	Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

<u>10</u> % Cobble	% Gravel	% Sand	<u>90</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>5% algae</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Ramon Blecker Date: 7/7/05

Organization: MNR Position: Env. Specialist

1276-003 D1



1276-003 D2



1276-003 D3



1276-003 D4



1276-003 U1



1276-003 U2



1276-003 U3



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: <u>1276-002</u>	Site Location Description: <u>NE 1253 Rd Bates Co.</u>	
Site GPS Coordinates: <u>N38.41754 W094.32040</u>		
Date & Time: <u>7/7/05 8:57 AM</u>	Facility Name: <u>Adrian WMTF</u>	
Personnel: <u>Aaron Bleibauer</u>	Permit Number: <u>MO 0112623</u>	
Current Weather Conditions: <u>Dry 75°F</u>	Weather Conditions for Past 7 days: <u>Dry</u>	
Photo Ids: Upstream: <u>7-10</u>	Downstream: <u>11-16</u>	Other:

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>Pasture, livestock</u>	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input checked="" type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>Trash in stream, oil on surface of water</u>				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

Page Two - WBID # 1246-002:

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>42</u>	Length (ft): <u>150</u>	Avg. Depth (ft): <u>1.5 ft</u>	Max. Depth (ft): <u>2.5 ft</u>
<input type="checkbox"/> Flow	Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated (ft ³ /sec):	

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>44</u>	Length (ft): <u>150</u>	Avg. Depth (ft): <u>1.5 ft</u>	Max. Depth (ft): <u>2.5 ft</u>
<input type="checkbox"/> Flow	Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Estimated (ft ³ /sec):	

Substrate*: (These values should add up to 100%.)

<u>30</u> % Cobble	<u>20</u> % Gravel	% Sand	<u>30</u> % Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>None detected</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input checked="" type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Organization: MDNR Position: Env. Specialist